

ABSTRACT OF THE DISCLOSURE

A tunable laser comprising a laser source for providing light with a wavelength along an optical path. A diffractive element is positioned in the optical path and spaced from the laser source for redirecting the light received from the laser source. A reflective element is positioned in the optical path and spaced from the diffractive element for receiving the light redirected by the diffractive element and for further redirecting the light back along the optical path to the reflective element. The diffractive element receives the light further redirected by the reflective element and returns the light along the optical path to the laser source. The optical path created by the laser source, the diffractive element and the reflective element causes the light to lase at the wavelength. At least one microactuator is coupled to one of the diffractive element and the reflective element for moving such element to select the wavelength of the light. A variety of microactuators that can be used with the tunable laser are provided.

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